



LIAISON COMMITTEE ON  
MEDICAL EDUCATION

# *Connecting with the Secretariat Webinar*

**Converting Data to Information:  
the Big Systems of LCME Accreditation**

**August 18, 2022**

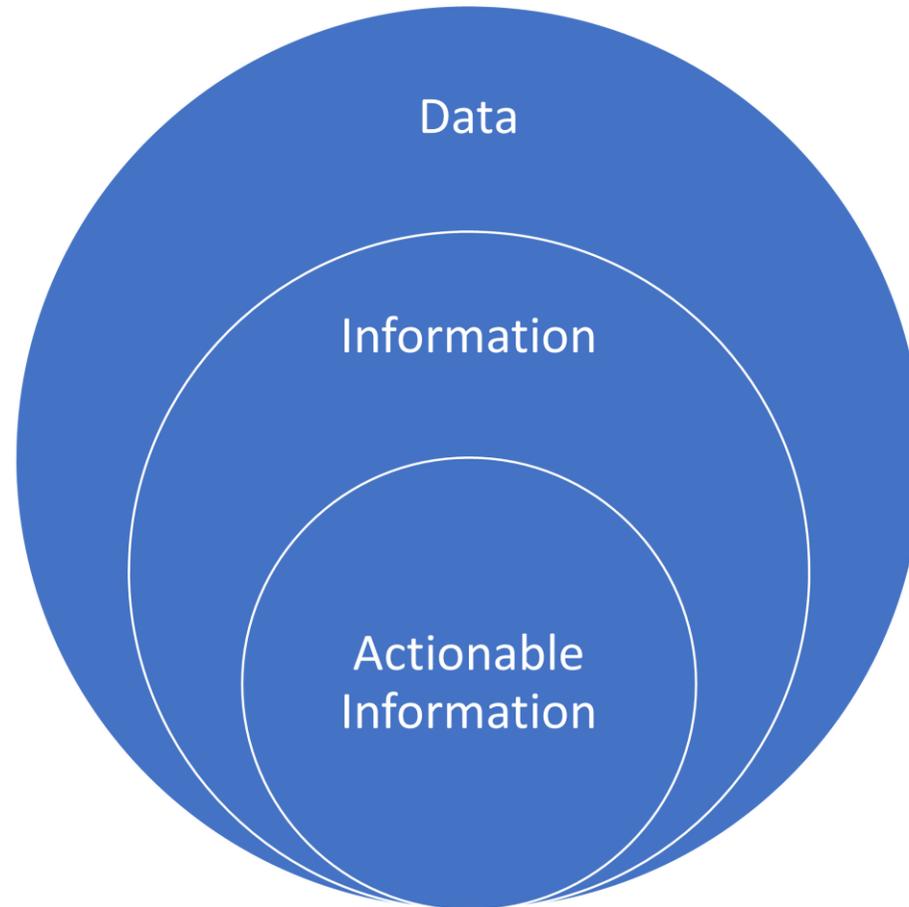
**1:30 pm – 3:00 pm ET**

**Welcome!**

Thank you for joining us for today's webinar. The program will begin shortly.  
You will not hear audio until we begin.

If you have technical questions, please email [aamc@commpartners.com](mailto:aamc@commpartners.com).

# Getting Down to Business: Transforming Data into Actionable Information to Drive Effective Accreditation Systems





# LCME Accreditation Elements Associated with “Big” Data and Systems to Utilize the Data

Element 1.1 (strategic planning and continuous quality improvement)  
Elements 8.3, 8.4 (curriculum management)  
Elements 3.5 and 3.6 (learning environment)  
Element 9.4 (assessment system)

**Key Concept:** Data are not the same as information is not the same as actionable information

# 1.1 Strategic Planning and Continuous Quality Improvement

A medical school engages in ongoing strategic planning and continuous quality improvement processes that establish its short and long-term programmatic goals, result in the achievement of measurable outcomes that are used to improve educational program quality, and ensure effective monitoring of the medical education program's compliance with accreditation standards.

- **Collection of non-random, targeted data** identified prospectively based upon goals (for strategic planning) and intent of the accreditation elements (for CQI)
- **Organization of collected data into information** based upon **sub-goals** (for strategic planning) and an understanding of each component of an element's **intent** (guidance provided by the DCI, webinars, white papers)
- Delineation of **specific actionable information** based upon **knowledgeable analysis of overall institutional structure/function** and upon **knowledgeable search for/analysis of root causes** when concerns are identified (provision of actionable information to those empowered to design and implement actions)
- **Outcome evaluation** to gauge **effectiveness** of those actions/interventions **and**, if needed, to **redesign (if ineffective) or repeat (to document sustainability)** the targeted data collected in the next cycle

# 1.1 Strategic Planning and Continuous Quality Improvement – *Common Pitfalls*

## Data

- Collection of multiple individual data points without prospective identification of the goals/intent of the element
  - Example: Human resources data vs school-identified diversity category data
- Emphasis on quantity of data collected (or how it is displayed on a dashboard) rather than its quality and specific relationship to the SP goals and/or accreditation elements
  - Examples:
    - Number of new faculty vs faculty trained and available to teach
    - New clinical sites vs quality and sufficiency of educational environment at those sites
    - Number of workplace-based assessments vs the ability of those assessments, in aggregate, to document student achievement of defined clinical skills by direct observation

# 1.1 Strategic Planning and Continuous Quality Improvement – *Common Pitfalls*

## Information

- Lack of organization of data into contextually useful categories
  - Example: Number of required clinical encounters/student/clerkship vs. number of students meeting the school's required clinical encounters at each clinical site
- Organization of data into non-informative categories as a result of poor understanding of the element's intent
  - Example: Compilation of student evaluations of all courses and clerkships as evidence of curricular phase review

# 1.1 Strategic Planning and Continuous Quality Improvement – *Common Pitfalls*

## Actionable Information

- Inability to identify and appropriately direct actionable information due to lack of knowledge of or appropriate utilization of institutional structure/function
  - Example: reports of student mistreatment from a particular clinical site vs clear mechanisms and authority for addressing the source(s) of the problem at that site
- Failure to communicate to all interested parties the plans implemented in response to actionable information
  - Example: M1 students informed of curricular modifications based upon M2 student feedback vs M1/M2/M3/M4 students regularly informed of these changes
- Failure to evaluate the effectiveness of the implemented plans and to adjust next CQI cycle accordingly
  - Example: identification of low rates of direct observation of clinical skills in a particular clerkship in a distributed model of education vs site-specific localization of challenging sites, determination of the root causes for the challenges, and design and implementation plans to correct the specific issues

## 8.3 Curriculum Design, Review, Revision/Content Monitoring

*The faculty of a medical school, through the faculty committee responsible for the medical curriculum, are responsible for the detailed development, design, and implementation of all components of the medical education program, including the medical education program objectives, the learning objectives for each required curricular segment, instructional and assessment methods appropriate for the achievement of those objectives, content and content sequencing, ongoing review and updating of content, and evaluation of course, clerkship, and teacher quality. These medical education program objectives, learning objectives, content, and instructional and assessment methods are **subject to ongoing monitoring, review, and revision** by the responsible committee.*

- Define the **process** and **desired outcome(s)** for each level of review (i.e., for review of courses/clerkships, curriculum phases, curriculum as a whole).
- Select **specific and relevant data (quantitative or qualitative)** appropriate for **each level of review**.
- Set **institutional expectations (e.g., qualitative or quantitative benchmarks)** for success for each data element.
- **Develop a method to “aggregate”** the data (quantitative and/or qualitative) relevant for the level of review.
- Determine whether the **individual data** and **aggregated data meet expectations (i.e., indicate success)** for the specific level of review/identify areas that require attention.

## 8.3 Curriculum Design, Review, Revision/Content Monitoring - *Common Pitfalls*

### Data

- Absence of prospective identification of specific data elements appropriate for/relevant to each level of review
  - Lack of definition of the desired outcome to be achieved and the relationship of data elements to that outcome
  - Inclusion of data elements that do not specifically contribute to that outcome
- Inability to measure (get data addressing) areas important to determine success for a level of review
- Overabundance of data (lack of priority setting for data collection and use)
- Lack of attention to how different data elements interrelate

## 8.3 Curriculum Design, Review, Revision/Content Monitoring - *Common Pitfalls*

### Information

- Lack of definition of the outcome to be achieved for each level of review and what must to be known to decide if success has been achieved
- Question: Does the review indicate that the course/clerkship, phase, curriculum as a whole is successful?
- Examples of Gaps:
  - Attention only to student satisfaction with/performance in a course, without consideration of how the course contributes to the success of the phase/curriculum as a whole
  - Course/clerkship evaluations used as a sole measure of the outcomes of a phase, without evaluation of whether the phase accomplishes its aims (e.g., prepares learners for the next stage of training)
  - Evaluation of the curriculum as a whole is based on a number of independent (some nonspecific)/individual assessments without links to desired curriculum outcomes (competencies)

## 8.3 Curriculum Design, Review, Revision/Content Monitoring - *Common Pitfalls*

### Actionable Information

- Inability to make judgments or implement corrections at each level of review based on insufficient information or misunderstanding(s) about what is needed to achieve outcomes.
  - Example: courses and/or phases are deemed to be successful, but there is no evidence that they contribute appropriately to curriculum outcomes
- Corrections made based on evaluation results, but they do not “solve the problem”(lead to success) because of incomplete data, incomplete outcome evaluation leading to incomplete understanding of what is required to “fix” the problem

## 8.4 Evaluation of Educational Program Outcomes

*A medical school **collects and uses** a variety of outcome data, including national norms of accomplishment, to **demonstrate** the extent to which medical students are **achieving medical education program objectives** and to enhance the **quality** of the medical education program as a whole. These data are collected **during program enrollment and after program completion**.*

- Identify data elements for the evaluation of each educational program objective (EPO as defined in Element 6.1). Ensure that the data elements are **directly and specifically related** to the intent/desired outcome of the EPO. Data elements include performance, but also things such as student satisfaction with the teaching and presence of relevant content in the curriculum (necessary to know why the EPO is or is not completely attained).
- Ensure that the data elements used for evaluating the outcome of each EPO cover the breadth of where the EPO is taught (e.g., within a curriculum phase/within the curriculum as a whole) and assessed.
- Note the expectation that relevant data, where appropriate, are collected from graduates who provide their perceptions of whether they have been prepared in that EPO.
- As in Element 8.3, prospectively determine how the data will be used (“aggregated” quantitatively or qualitatively) to determine if the EPO has been met.
- Use the information to identify gaps that might cause poor performance.

## 8.4 Evaluation of Educational Program Outcomes – *Common Pitfalls*

### Data

- Data needed to evaluate the attainment of each EPO have not been identified.
- Data elements are random (e.g., selected because they are easily attainable), at an inappropriate level of specificity (e.g., student performance in an examination vs. performance in the portions of the examination that relate to the specific EPO under review), and or/ not explicitly linked to EPOs.
- There is an incomplete set of data elements or data elements from only a portion of the curriculum (e.g., only student performance data for one course that relates to the EPO).

## 8.4 Evaluation of Educational Program Outcomes – *Common Pitfalls*

### Information

In the DCI for Element 8.4, there is a request for examples of how the school evaluates selected EPOs

- There is no mechanism to prioritize/aggregate data related to the EPO.
- There is no information about the process used to aggregate data related to a given EPO/no benchmark set for adequate performance.
- There is no information about how determinations about success in achieving the EPO will be made.
- A comprehensive set of data related to performance across the relevant portions of the curriculum for the given EPO is not used.

## 8.4 Evaluation of Educational Program Outcomes – *Common Pitfalls*

### Actionable Information

- There is no specific information about whether the EPO has been met or has not been met.
- If there are problems/gaps identified in EPO performance, there is no/insufficient information about the basis for this result (about what is needed to correct the problem) and consideration of whether/where the curriculum the change(s) need to occur.
- In developing a plan for correction, there is no consideration of the root causes of inadequate performance in the EPO (e.g., sufficiency of resources to support student learning).

## 9.4 Assessment System

A medical school ensures that, throughout its medical education program, there is a centralized system in place that employs a variety of measures (including direct observation) for the assessment of student achievement, including students' acquisition of the knowledge, core clinical skills (e.g., medical history-taking, physical examination), behaviors, and attitudes specified in medical education program objectives, and that ensures that all medical students achieve the same medical education program objectives.

**Key issues for satisfying the intent of this element are:**

- The school has a centralized assessment system in place
- The assessment system employs a variety of measures to assess student achievement
- The assessment system ensures that all medical students achieve the same medical education program objectives

## 9.4 Assessment System – *Common Pitfalls*

### Data

- Collection of multiple individual data points without prospective identification of the goals/intent of the element
  - Data sources for this element are typically school course/clerkship evaluations, AAMC GQ, ISA, or other special student surveys.
  - Surveys designed by the school don't include questions that assist the school in addressing the intent of the element.
- Emphasis on collecting data from various sources without reconciling disconnects across those data sources
  - Example: The school policy is that 100% of students receive adequate clinical skills instruction/observation/assessment but student survey data disagree.
  - As a part of the centralized assessment system, the school needs to determine the reason(s) for apparent inconsistencies across data sources, but this is not occurring.

### Information

Organization of data into non-informative categories as a result of poor understanding of the element's intent

- Compilation of student survey data from numerous sources as evidence of a centralized system without adequate centralized interpretation of the data
- No interpretation of the data that addresses inconsistencies across data sources
- Lack of evidence to show that all medical students achieve the medical education program objectives

## 9.4 Assessment System – *Common Pitfalls*

### Actionable Information

- Failure to reconcile the disconnect across various data sources and evaluate the effectiveness of changes made to address identified issues
  - Causes of the disconnect have not been investigated.
  - There is no school administered survey to determine the effectiveness of any intervention(s) to address identified issues.
- Failure to communicate to all interested parties the plans implemented in response to actionable information
  - Data from follow-up surveys to address “disconnect” issues are not shared with students, faculty, and staff.
  - Students, faculty, and staff have not been informed of the school’s response to address issues raised by the different data sources.



LIAISON COMMITTEE ON  
MEDICAL EDUCATION

## 3.5 Learning Environment/Professionalism

A medical school ensures that the learning environment of its medical education program is conducive to the ongoing development of explicit and appropriate professional behaviors in its medical students, faculty, and staff at all locations. The medical school and its clinical affiliates share the responsibility for periodic evaluation of the learning environment in order to identify positive and negative influences on the maintenance of professional standards, develop and conduct appropriate strategies to enhance positive and mitigate negative influences, and identify and promptly correct violations of professional standards.

- Identification of the data sources and data to be used to evaluate the learning environment for each type of setting (pre-clerkship, laboratory, clerkships, off-site experiences, etc.)
- Identification of tools for data collection and types of data to be collected for each type of environment, based on the program's stated expectations for professional behaviors
- Identification of the "who and when" of converting the data into actionable information
- Reevaluation – how and when – for any actions taken

## 3.5 Learning Environment/Professionalism – *Common Pitfalls*

### Data

- Not collecting data on the learning environment
- Not collecting data on all learning environment settings
- Lack of a central point of data collation/analysis

## 3.5 Learning Environment/Professionalism – *Common Pitfalls*

### Information

- Failure to identify both focal and systemic aspects on data
- Failure to analyze data cross sectionally to identify systemic opportunity for improvement
- Failure to include appropriate stakeholders in information synthesis

## 3.5 Learning Environment/Professionalism – *Common Pitfalls*

### Actionable Information

- Failure to identify responsible parties for actions – including collective responsibilities
- Failure to act systemically or consider systemic action
- Failure to monitor effectiveness
- Failure to provide constructive feedback to participants in the environment

## 3.6 Student Mistreatment

A medical school develops effective written policies that define mistreatment, has effective mechanisms in place for a prompt response to any complaints, and supports educational activities aimed at preventing mistreatment. Mechanisms for reporting mistreatment are understood by medical students, including visiting medical students, and ensure that any violations can be registered and investigated without fear of retaliation.

- Collection of data from multiple sources (ISA, internal surveys, AAMC GQ, reporting platforms) to identify 1) awareness of policy and procedure, 2) frequency, types, location of reported incidences, 3) confidence in the program to protect the reporter and act when appropriate
- Cross-referencing of data to confirm results/identify discrepancies. Turn data into specific areas of focus (including identifying root cause) and actionable information to inform and guide corrective actions.
- Reevaluate with like tools and data collection

## 3.6 Student Mistreatment – *Common Pitfalls*

### Data

- Reliance on single data source
- Lack of cross-sectional data
- Generalized vs. specific data collection
- Data collection tools and methods (where, how)

## 3.6 Student Mistreatment – *Common Pitfalls*

### Information

- Not using data to identify “hot spots” and problematic areas
- Not using data to identify need for further exploration of concerns
- Not investigating causes of discrepancies in data from different sources

## 3.6 Student Mistreatment – *Common Pitfalls*

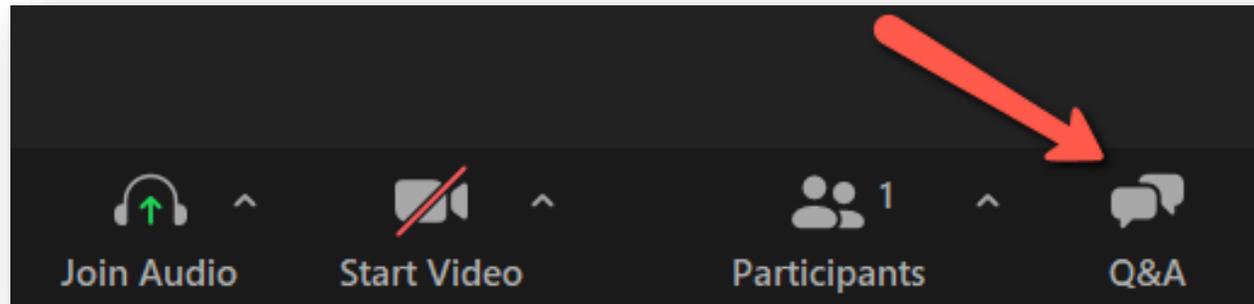
### Actionable Information

- Failure to communicate concerns to individuals with authority to act
- Failure to explore root cause when source or problem is not clear
- Failure to collect follow-up data after actions taken
- Failure to inform stakeholders of actions taken

# Open Q&A

## How to ask questions in Zoom:

Participants can ask questions by hovering their mouse at the bottom of the screen to bring up their toolbar.



Click the Q&A icon and a box will open where you can submit a question.

*Participants will not see other participants' questions. Only speakers will see the questions submitted.*



# LCME Secretariat Private Consultations at Learn, Serve, Lead 2022: The AAMC Annual Meeting

LCME Private Consultations are available November 12-14, 2022, by appointment. Submit and complete the online form to schedule:

<https://www.jotform.com/lcme/lcme-consultation-request>

**LCME**  
LIAISON COMMITTEE ON  
MEDICAL EDUCATION

## Secretariat Consultations

LCME Secretariat Private  
Consultations during Learn,  
Serve, Lead 2022

November 12-14, 2022, the LCME  
Secretariat will host private  
consultations during LSL in Nashville,  
TN.

Click on the link below to request a  
consultation.

[Sign Up for a Consultation](#)



# Next Webinar: Thursday, September 8, 2022

A promotional graphic for the "LCME MYTH-BUSTERS" campaign. The graphic has a dark blue background with a yellow and black striped border at the top and bottom. The text "LCME MYTH-BUSTERS" is written in large, white, bold, sans-serif font. Below it, a yellow rectangular button with a black border contains the text "SUBMIT YOUR MYTH" in bold, black, sans-serif font. To the right of the button, there is a text box with a dark blue background and white text. The text in the box reads: "In these times of 'false news,' we ask whether you have heard something about the LCME, but are not sure if it's true... Fill in the blank: 'But the LCME says we have to \_\_\_\_\_.' Submit anonymously through the online form here:" followed by a blue button with the text "Complete and Submit the Form". Below the button, it says "Submit your comments by Tuesday, August 30th. Myths will be addressed on the [September 8th webinar](#)." The background of the graphic is decorated with several question marks of varying sizes and colors (white and yellow).

Email [lcme@aamc.org](mailto:lcme@aamc.org) with element or topic suggestions.